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Presentation Title:	"Study of Scattered Light From Known Debris Disks"
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Abstract:

Using the Spitzer Space Telescope, a group of edge on debris disks, surrounding main-sequence shell stars have been discovered in the infrared. These disks are of high interest because they not only have dust, but an observed amount of circumstellar gas. HD158352 was an ideal target to try and image the disk because it was one of the closest stars in this group. Using the Hubble Space Telescope's Space Telescope Imaging Spectrograph (STIS), we attempted to take a direct image of the light scattered from the known disk in a broad optical bandpass. Studying these particular type of disks in high detail will allow us to learn more about gas-dust interactions. In particular, this will allow us to learn how the circumstellar gas evolves during the planet-forming phase. Even though it was predicted that the disk should have a magnitude of 20.5 at 3", no disk was seen in any of the optical images. This suggests that the parameters used to predict the brightness of the disk are not what we first anticipated and adjustments to the model must be performed.

We also present the blue visible light spectrum of the scattered light from the debris disk surrounding Beta Pictoris. We are analyzing archival observations taken by Heap, using Hubble Space Telescope's STIS instrument. A long slit with a bar was used to occult Beta Pictoris as well as the PSF star. This was done because it is necessary to subtract a PSF observed the same way at the target to detect the disk. It appears that we have detected light from the disk but the work was in progress at the time of the abstract deadline.